BOOK REVIEWS.

THE ANALYSIS OF MIND. By Bertrand Russell, F.R.S. London: George Allen and Unwin, Ltd., New York: The Macmillan Co. Pp. vii, 310. Price, 16s. net.

The title of this book is perhaps slightly misleading. It is not a treatise on analytical psychology, but a series of lectures mainly on the significance and implications of recent theories of behaviourism. Many of the facts that are emphasized by the behaviourists are of course by no means new discoveries. It has long been a matter of general knowledge that many actions, both human and animal, that are apparently guided by rational choice have to be interpreted on a much lower basis. The awful consequences that would ensue to the centipede if it had to consider which leg is to "come after which" are familiar to most of us; and we are aware that many of the ostensible thoughts of human beings are little more than parrot-like repetitions of words. The behaviourists, however, extend the range of such interpretations so widely as almost, if not quite, to eliminate conscious purpose from the universe altogether. Obviously a view of this kind demands consideration from the ethical as well as from the purely psychological point of view. As Mr. Russell says (p. 27) "It is humiliating to find how terribly adequate this hypothesis turns out to be." It is humiliating because it seems to reduce human life essentially to the animal level and animal life to the level of physiological process. It only needs a slight extension of this levelling process to resolve physiology into chemistry and physics. Without absolutely accepting these apparent consequences of the behaviourist contention, Mr. Russell certainly makes very large concessions to it. It is well to note, however, that he urges that the acceptance of such a position does not necessarily lead to pure materialism; for, as he says in the Preface, "An old-fashioned materialism can receive no support from modern physics." The view to which he inclines is rather that of William James and others, "According to which the 'stuff' of the world is neither mental nor material, but a 'neutral stuff' out of which both are constructed." The use of the word "stuff," however, seems to bring the ultimate reality somewhat nearer to Matter than to Spirit; but this may be only a verbal objection. Obviously it would not be

possible to discuss this doctrine within the limits of such a review as the present, but it may be worth while to notice some points on which Mr. Russell's statements appear to be open to criticism.

First, with reference to the suggested reduction of all laws of action to those of physics and chemistry. Mr. Russell refers more than once to the view of Mr. J. S. Haldane "that physiology is not theoretically reducible to physics and chemistry"; and he urges (p. 90) that "we ought certainly to require very strong evidence before admitting any such breach of continuity as between living and dead matter." It is significant that the reduction suggested is to "physics *and chemistry.*" I should have thought that even in the case of chemical processes the behaviour of a compound could not be predicted from that of its component parts. In the case of a living organism the difference is so marked that the conception of "organic unity" has come to be applied generally to all wholes that cannot simply be treated as sums of their parts. The way in which this conception has been applied, for instance, by Dr. G. E. Moore to the consideration of values is well known. On the whole, it is surely still true that the *onus probandi* lies upon those who claim that the more complex unities can be directly explained by means of the more simple.

"It is clear from many instances," Mr. Russell notes in another place (p. 259) "that accuracy may be purely mechanical. The most complete form of accuracy consists of giving correct answers to questions, an achievement in which calculating machines far surpass human beings." He might have added that books often convey very accurate information, that a watch can sometimes be trusted to tell the time of the day, and that an æroplane is much better at flying than any man. But Heine's well-known gibe against the English, that their machines are like men and their men like machines, can hardly be said to be "humiliating" in its first member; and it is not even certain that it is so in its second. What can be done mechanically may very well be left to mechanism. We are then all the freer to perform without mechanism the more important things that it cannot achieve. At any rate, though Paley's watch is no doubt somewhat out of date, it would surely be strange that the perfection of a machine should be taken as evidence of the *absence* of intelligence. The answers that the calculating machine gives are supplied, in reality, by the man who designed it; and he had to give a good deal of thought to its construction.

The discussion of Belief is one of the most interesting parts of Mr. Russell's work. On the general nature of Belief he accepts the statement of James—"*In its inner nature, belief, or the sense of reality, is a sort of feeling more allied to the emotions than to anything else.*" The plausibility which this view has seems to me to depend partly on a confusion between simple belief and the special kind of belief that is commonly called Faith (which appears to be a compound of simple belief and a sense of the importance of the thing believed). This confusion is more readily fallen into in German, where the word "*Glaube*" does duty both for the simple and the complex fact. In English it ought to be more easy to guard against it. The belief that $3+4=7$ does not appear to me to be emotional; but the belief of the Pythagoreans that 3, 4 and 7 are specially important numbers may very well contain an emotional element. Similarly, I can hardly think that there is anything emotional in the belief that London is situated on the banks of the Thames; but there may very well be an emotional element in the belief that London contains some undesirable slums which might with advantage be remodelled. The faith of the mystic or of the social reformer seems to contain something that is not present in the simple belief of the arithmetician or geographer.

In connection with Belief, it is interesting to note that Mr. Russell has somewhat modified his view of the correspondence theory of truth (pp. 271–3). As one of those who have expressed dissatisfaction with his previous statements, I may perhaps be permitted to say that his new statement seems much more acceptable. I still think, however, that it is somewhat misleading to speak of the truth or falsity of beliefs. A logical judgment or proposition, when its meaning is fully and clearly set forth, is either definitely true or definitely false. But a belief (even when not emotional) is a psychological, not a purely logical fact. It does no doubt contain a logical judgment, but usually qualified by perhapses and other modifying clauses, not always clearly apprehended; so that it cannot be said to be definitely true or false, but only more or less correct or erroneous. And it is very liable to change, especially when it contains an element of emotion. The beliefs of Philip drunk and Philip sober are notoriously apt to be different. This distinction appears to me to be of fundamental importance.

It is the duty of a critic to criticise, but he is also permitted

the pleasure of appreciation; and I am glad to have the opportunity of stating that this book is characterised by all that versatility, openness of mind, brightness of expression, and aptness of illustration, that we have learned to expect in any work by Mr. Russell. As an instance of a particularly good statement, reference may be made to his treatment of the general nature of pleasure and discomfort (pp. 68–72) and I may conclude this notice by quoting a passage in which the ethical bearing of the behaviourist psychology is very well indicated: "When some desire that we should be ashamed of is attributed to us," he remarks (pp. 31–2) "we notice that we have never had it consciously, in the sense of saying to ourselves, 'I wish that would happen.' We therefore look for some other interpretation of our actions, and regard our friends as very unjust when they refuse to be convinced by our repudiation of what we hold to be a calumny. . . . We say: 'I desire to be kind to my friends, honourable in business, philanthropic towards the poor, public-spirited in politics.' So long as we refuse to allow ourselves, even in the watches of the night, to avow any contrary desires, we may be bullies at home, shady in the city, skinflints in paying wages and profiteers in dealing with the public; yet, if only conscious motives are to count in moral valuation, we shall remain model characters." The deceitfulness of the human heart has, of course, been long familiar to us; but behaviourism certainly helps us to see its explanation more clearly. The only doubt is whether the *seeing* of it is itself an instance of "behaviour" in the technical sense.

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A STUDY IN REALISM. By John Laird, M.A. London: Cambridge University Press; New York: The Macmillan Co., 1920. Pp. ix, 228.

Both for its matter and its manner this book should have a wide circle of readers. It is a shining example of how even in the midst of the most technical philosophical subtleties grace and wit may survive without any sacrifice of clearness and force. However the author may be physically constituted, he is mentally eupeptic, and he has been nourished evidently on a well-balanced diet. The resulting sense of reserve and poise adds greatly to the comfort of the reader.